Amendments to the Specification:

Please amend the abstract as follows:

A system and method for determining a patient's oxygen uptake the volume of exygen taken up by the lungs of a human or veterinary patient. A spirometric device containing oxygen is connected to a [[A]] closed ventilation circuit is connected to a spirometric device, which contains a quantity of oxygen. As oxygen is taken up by the patient, an equivalent volume of oxygen passes from the spirometric device into the ventilation circuit. This provides a simple measurement of the patient's oxygen uptake. The volume of oxygen that moves from the spirometric device may thus be measured as an indication of the volume of oxygen that has been taken-up-by the patient. In some embodiments, a source of make-up Make-up oxygen may be added is connected to the ventilation circuit and the flow of make-up oxygen is adjusted as necessary to maintain a substantially constant volume of oxygen in the spirometric device. The volume of makeup oxygen is measured and serves as an indication of the added will be equal to the amount of oxygen taken up by the patient. A valve may be used to close-the The spirometric device may be isolated from the off from the ventilation circuit during all but a part of the ventilation cycle (e.g., all but the late expiratory phase) to prevent unwanted substantial pressure or movement excursions within the spirometric device.